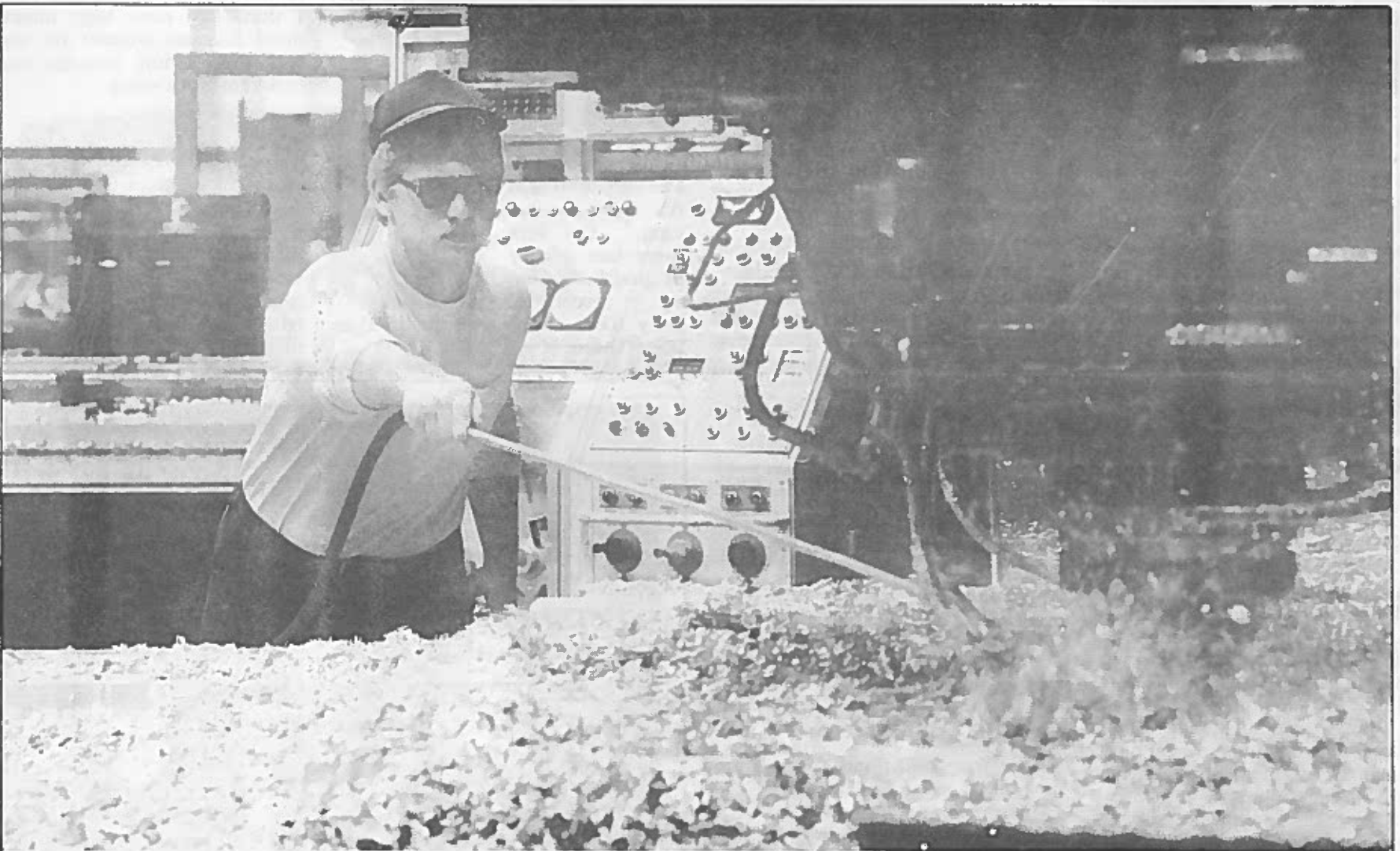


GRUMMAN plane news

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Glen Arm - Machine shop showcase

At Plant 56 in Glen Arm, Maryland, Alan Pietra uses compressed air to blow pieces of titanium away from cutting tools. For an inside view of Grumman's Maryland facilities, see page 4.

Multi-year pact signed for Greyhound

-pg. 3

Two-for-one split up for vote July 21

-pg. 3

At Cape, Grummanites await word on SPC award

Not since the first Shuttle mission have so many space fans gathered on the beaches and roadsides surrounding Cape Canaveral for a Shuttle launch. A half a million people were on hand June 19 to cheer the Shuttle *Challenger* as it blasted off the launch pad. They also came to see history being made. Sally Ride became the first U.S. woman astronaut to fly in space.

"Sally Ride and all the rest of the female astronauts are very knowledgeable in their fields," said Fred Haise, a former Apollo and Shuttle astronaut and now president of Grumman Technical Services. "They are all highly motivated; they want to fly in space. Sally joined NASA a year before I left. Aside from being a very talented young woman, I remember her as being very athletic. She was very hard to beat in tennis and paddleball."

Haise, along with other Grummanites, viewed the historic launch from the V.I.P. stands. Although the woman astronaut aboard the Shuttle was the news of the day, conversations turned to the Shuttle Processing Contract (SPC) which NASA will award later this summer.

"We are coming to the end of a long trail," said Haise. "We started pursuing the SPC in October 1981."

In November 1982, Grumman joined the Lockheed-led team competing for the multi-billion dollar NASA contract. The team submitted its proposal on April 29, 1983.

SPC will simplify the launch preparation of the Shuttle between flights by turning the work over to one industrial team instead of the present 16 NASA subcontractors. Grumman's role would be management of the launch processing system — an elaborate network of computers and software systems used in the turnaround process at both Cape Kennedy and Vandenberg Air Force Base, California, launch sites.

Joining Grumman and Lockheed are Thiokol, builders of the solid booster motors for the Shuttle and Pan American Airlines.

"NASA will select the winning team around August 15," said Haise. "Right now, it is in the 'best and final offer' stage. The winner will take over the shuttle processing effort October 1."

Maslak fields queries about new MAS Plan

It was in January that the MAS (Merit Advance System) Plan went into effect. Under the plan, any full-time Grummanite who gets a merit increase in salary can opt to take half of the total annual increase in a lump sum.

"Not bad!" said half of all Grummanites who got merit increases, and they took advantage of it.

Many Grummanites have questions about the plan, however, and Frank Maslak, manager of Corporate Salary Administration, answers the most frequently asked:

What are the major advantages and disadvantages of the plan?

The chief advantage is that you receive an immediate lump sum of money. In effect, the MAS Plan enables the recipient to have an interest-free advance. The only disadvantage might be a temporary reduction (for six months) in your take home pay resulting from tax effects. Effects are under way to change the administration of the plan so that such reductions will never exceed two or three dollars per week, and generally will be within a dollar. If all goes well, and

the plan is continued next year, such a change will be put into effect.

Will taking the advance affect my overtime earnings?

No. Overtime earnings will be based on your new gross salary and therefore will be exactly the same whether or not you opt for the advance.

What effects will the merit advance have on my taxes and other deductions?

None. All deductions and contributions are handled the same way, whether or not you opt for the advance.

It seems like I am being taxed twice; first on the advance, and then on my regular check. Is this true?

No. The only taxes you pay are on your regular weekly or biweekly earnings. The advance money is reduced to provide for taxes and FICA that will result from the increase in your salary.

If you have a question about the MAS Plan, call Corporate Salary Administration, Ext. 2669.

What do you think?

On Saturday, June 19, the Shuttle *Challenger* blasted off the Kennedy Space Center launch pad without a hitch. The day before it landed at Edwards Air Force Base in California, *Plane News* stopped by McKay Field and asked Grummanites for their opinions about astronaut Sally Ride's historic flight on STS-7. What do you think?

Bob McNiece

"Oh, I think it's more than about time that we did that. The Russians have obviously done this some time ago. It's appropriate, they're certainly a part of our earth-born life and should be part of whatever life we have in space."



Tom Sinagra

"I'm a male chauvinist. I don't like women taking over men's jobs, so I personally don't think they should be there. I think they should be at home, doing dishes and cleaning. I think we have high unemployment because women are working and there's not enough employment for both sexes."



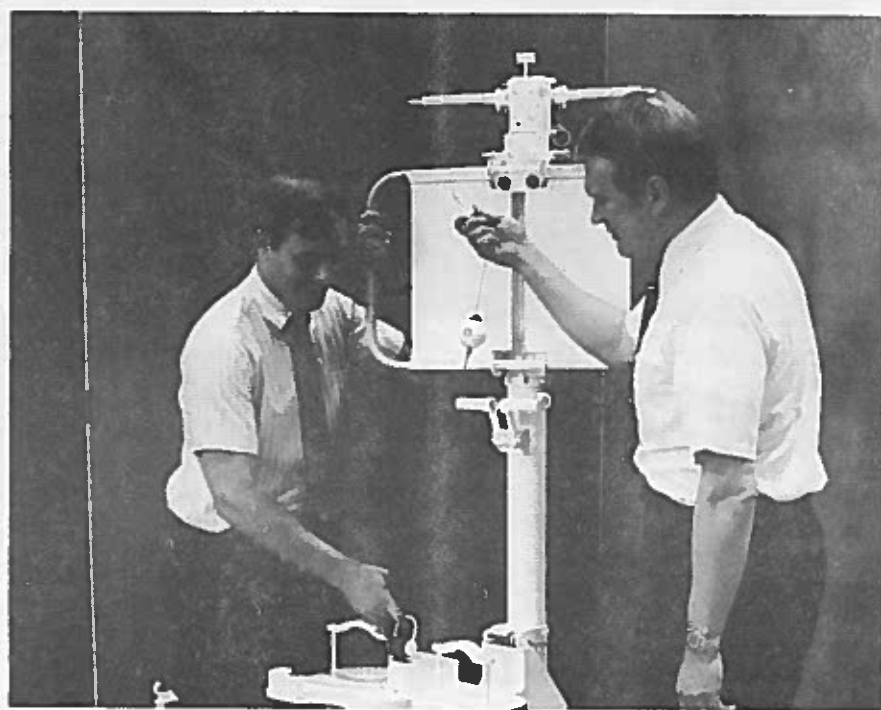
Victoria Janicki

"I think it's great. I'm surprised that it's taken us so long. I'm sure there are plenty of qualified women — especially Sally Ride. She's well qualified to be up there."



James Middleton

"I think that it's a great accomplishment for a woman to go into space. She's trained — just like a man in space."



Sure footing

Astronauts Jerry Ross (L) and Karol Bobka were in Bethpage recently for acceptance testing of the foot restraint system Grumman is building for NASA. This model which the astronauts are checking out will be used in underwater tests at the Johnson Space Center in Houston, Texas. The flight article, which will be attached to the Space Shuttle's remote manipulator arm to help astronauts do satellite repair work, will be delivered in September.



Green light. On June 14, Grumman and the Navy signed a \$678 million contract to build 39 C-2A carrier on-board delivery planes.

Multi-year contract signed for Greyhound

Grumman Aerospace signed a \$678 million contract on June 14 to build 39 C-2A carrier on-board delivery aircraft for the U.S. Navy.

This is naval aviation's first major multi-year contract and allows considerable cost savings through quantity production instead of year-by-year authorizations.

"The Navy, Grumman and our subcontractors have mounted an aggressive cost-savings effort on this multi-year program," said Grum-

man Aerospace President George Skurla. "Quantity production will allow us to deliver 39 aircraft for what 34 would have cost under traditional year-by-year contracting."

Grumman estimates that multi-year contracting will save \$89 million. That's a \$31 million improvement over the original cost-savings estimate of \$58 million made in February 1982, when the company signed the C-2A advanced-procurement contract.

The program reopens a production line which built 19 C-2As during the 1960s. The twin-engine, turboprop C-2A keeps aircraft carrier battle groups supplied with spare parts and weapons. It can also be outfitted to carry up to 28 passengers.

It can carry five tons of cargo over 1,200 nautical miles from land bases to aircraft carriers.

The first C-2A under the new contract will be delivered in January 1985. Eight aircraft will be delivered each year from 1985 through 1988 and seven in 1989 to complete the procurement. The aircraft will be built in Bethpage, but parts and assemblies will be made in Glen Arm, Great River, Houston, Milledgeville and Stuart. About 1,000 people from the existing workforce will be employed on the program.

Shareholders to vote on two-for-one split

Aiming for a more attractive market price for a wider range of investors, Grumman Corporation's board of directors is asking shareholders to approve a two-for-one split of the company's common stock.

A special meeting of shareholders will be held on Thursday, July 21, at 2 p.m. in Plant 28A to approve a charter amendment. If approved, this amendment would increase the number of authorized shares of common stock from 30 million to 80 million and authorize the two-for-one split.

Commenting on the proposed amendment, Chairman Jack Bierwirth said, "We think that it will result in a more attractive market price for a wider range of investors and increase our shareholder base and trading activity. The increase in authorized shares will also afford us greater flexibility in meeting future stock needs."

Starting June 30, Bankers Trust Company, agent for the trustees of the Grumman Employee Investment Plan (EIP), began mailing Plan members proxy statements and confidential cards for voting at the special shareholder's meeting.

EIP investors are asked to return the completed cards by July 15 to Bankers Trust Company in the self-addressed, postage-paid envelopes that accompany the proxy statements.

"Because Grumman shares obtained through the Investment Plan are held in trust for each individual member, being a Plan member does not automatically entitle participants to attend the special meeting," said Bob Bradshaw, Grumman Corporation vice president and secretary. "Only those persons owning shares of record — that is, shares purchased outside the Investment Plan prior to the record date of June 27 — are eligible to attend."

Save time, mail your vote

"And, while such shareholders are of course entitled to attend the special meeting in person, the only matter to be determined is the proposed charter amendment. Attendance, therefore, is not encouraged. It is very important, however, that your shares be represented at the meeting, so be sure you mail in your proxy cards."

If shareholders approve the charter amendment, the two-for-one split will take place on or about August 1. Shareholders of record

at the close of business that day would be entitled to get one additional share of stock for each one they hold, with the new certificates being mailed about August 19. Any dividends paid on or after August 1, 1983, will be paid on the total shares held after the split.

If you own a piece of Grumman through the Investment Plan, you will see the result of the two-for-one split in the EIP third quarter report.

Split history

Since 1940 when Grumman started listing on the New York Stock Exchange, there have been two stock splits . . . a two-for-one split of shares in May 1965 and three-for-two split in March 1967. During the Thirties before the company went public, there were several five-for-one splits.

Grumman went public in December 1937. Shares were sold to employees for \$7.50; \$9 to the public. As of Monday, June 27, a Grumman share went for \$63 3/4.

obituaries

ROBERT D. SEMPRINI of Requirements Planning, Pl. 30, died June 4 at the age of 47. He had been with the company since 1954 and resided at 11 Lynhaven Place, Commack.

DONALD J. HANDKIN of Quality Control, Pl. 77, died June 5 at the age of 43. He had been with the company since 1968 and resided at 5195 Myrtle Drive, Ft. Pierce, Florida 33450.

ADRIAN R. DOUCETTE of Commun. Nav. & I.F.F., Pl. 14 died June 16 at the age of 62. He had been with the company since 1969 and resided at 146 Washington Ave., Garden City.

FRANK LENT of Machine Structure & Proto., Pl. 2, died June 16 at the age of 65. He had been with the company since 1967 and resided at 457 18th St., West Babylon.

Personals

I would like to thank all my friends for their kind expressions of sympathy during the recent loss of my mother. Barbara Arp

We wish to thank all our friends for their expressions of sympathy during the recent loss of our mother. Gus and Bill Lanzo

Leaving so many of the friends I've made at Grumman wasn't easy. I'd like to thank all of you for making my retirement an event I'll remember and treasure all my life. I love you all. Olga Campbell

The family of Mr. and Mrs. Gene Goltz gratefully acknowledges your kind expression of sympathy and all the mass cards, the flowers, and for the concern of Susan's death. The Gene Goltz Family

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GRUMMAN plane news

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Glen Arm, Maryland

In the machining fie



Thoroughbreds graze along the slopes of the Long Green Valley, munching on sweet Maryland grasses.

Meanwhile, in two buildings in the valley on Long Green Pike, machinists carve out finely finished machine parts from huge slabs of titanium, steel and aluminum for the Navy's airborne thoroughbreds.

Glen Arm, Maryland, is the home of Grumman's Plant 56. "It is the principal production machine shop for Grumman," says Vincent Ciampa, the general manager of Machining Operations. "It is our showcase."

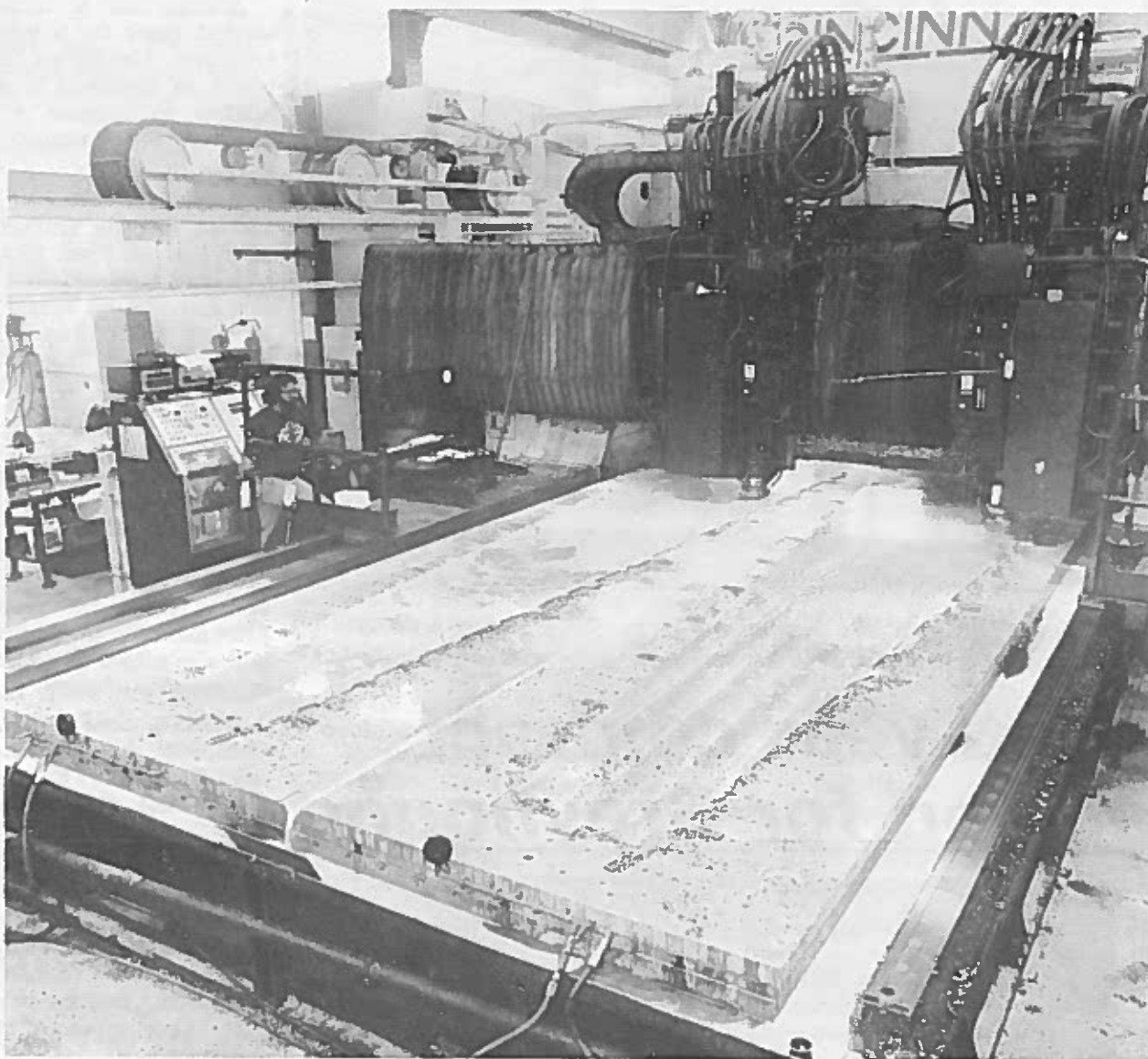
Glen Arm is where some 250 Grummanites turn out big, complex machined parts. Though some machining, especially prototype and development work, is still done in Plant 3 in Bethpage, about 60 percent of all the large, production machine parts needed for Grumman's military and commercial aircraft programs are made in Glen Arm.

The Grumman sign has only hung outside the door of the Glen Arm facility since 1967.

"Back then," says Ciampa, "Grumman decided it needed to get into the machining business. We did not have a machining department here at Grumman; what we had was a machine shop. Yet, we were starting to see more machined parts on aircraft. For example, the A-6 was highly machined part-oriented."

According to Ciampa, the company had to decide whether to build a machining operation from scratch or bring a new member into the

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Thinking big. Alan Showalter supervises the operation of a numerically controlled machine finishing a pair of F-14 lower wing skins. These machines take their directions from a reel of Mylar tape. They can turn out huge, complex parts with differences in dimensions from part to part less than the thickness of a human hair.

'There is certainly no shortage of need for the kind of things we do.'

Grumman family.

Grumman brought in two new members: Automation Industries in Sterling, Virginia, and Glen Arm's General Engineering.

General Engineering was a contract shop, says Paul Causey, deputy general manager for Machining Operations. His office is in Glen Arm's Plant 56-1 building, on the west side of Long Green Pike. He's worked in that building since the day after Labor Day, 1953, when he joined General. "I'm part of the hardware," he quips now. He was General's engineering manager when they joined Grumman.

"It certainly has changed, from being a job shop to a state-of-the-art production operation," states Causey.

Both Plant 56 in Maryland and Plant 58 in Sterling turned out machined parts for Grumman until the late 70's. Causey recalls that when Grumman ran into financial difficulties then, "the two plants were running at 50 percent capacity when everyone thought the F-14 would go to two a month."

The decision was made to combine the two operations into Plant 56. Many of the Grummanites from Sterling transferred there.

By the end of 1977, the company was making a comeback and finding new business opportunities for Glen Arm.

"Fortunately, we got into the commercial business during that time," Causey explains. Grumman won an important contract to make wing skins for the Boeing 727. "We knew we would have to make our commercial reputation with Boeing somehow and it may have been the first time they *bought* wing skins from

Id, they're the thoroughbreds



Skilled people. Jim Rutledge (photo upper L) gauges an A-6 wing beam, while (center) Fred Kirkman puts the finishing touches on an F-14 wing pivot fitting. Want to make machined parts for a high-performance aircraft? All the instructions are on these Mylar tapes (lower L) NC tape librarian Joan Gebhardt keeps catalogued.

puter programmers.

The MOP tells the operator how to set the metal plate or casting on the huge table the numerically controlled machine sits on. Along with the MOP, the operator gets a set of cutting tools; one for each step for each spindle. The operator will switch the cutting tools in each spindle at each step in the machining process. All three spindles are making the same cut at the same time.

The machine is "told" how deep to make a cut, or how far up and down or left or right, or at what rate to cut, by instructions contained on a Bethpage-programmed Mylar tape or floppy disk.

"Automation made it possible to make parts that couldn't have been made years ago," says Causey. "Take the lower wing pivot fitting of the F-14. Geometrically, it's very complex. But with tape and numerically controlled, five-axis machines, it's not so difficult to make."

A walk through Plant 56 with John Otterstedt will convince you of that.

Otterstedt, the plant manager, calls over the whine of the heavy machinery to point out a huge "Cincinnati," with its 105 foot long table. Later, he'll show you a new Shin Nippon Koki, one of four of these modern machines that Glen Arm has.

What will strike you most is that the machinists operating them spend much of their time watching, checking. Someday soon, says Otterstedt, they won't even have to change cutting tools; the factory of the future is coming to Grumman.

"The name of the game is to keep the cutting tool moving and removing metal," he says. "The concepts we're looking at now — shuttle tables, automatic tool changing and electronic gauging — will help us do that better."

"With shuttle loading, the operator can be loading one table with the raw material for the next job while the material on another table is being machined," says Otterstedt.

Ciampa points out that, beyond that, Grumman is looking to tie in Glen Arm's machines by wire with computers in Bethpage.

The computer, someday, will feed instantly updated machining instructions directly to the machines in Glen Arm.

"Eventually, we'll add graphics and eliminate the MOP. It will speed up the total machining process." The people who'll be running those machines, he points out, will have to know their math, but still love the smell of machine oil.

Why is Grumman planning to make such large investments in machine tools when the aerospace industry seems to be moving away from metals and towards composites?

"Certainly, that's the thing of the future," says Causey. "There is less sheet metal, but there is also an increase in the complexity of machined parts needed. There is certainly no shortage of need for the kind of things we do."

Ciampa agrees. "Machined parts will become more complex. The higher percentage of composites drives more complexity into machined parts. The machined part is the primary load-carrying structure in a composite assembly."

There are many machine shops throughout the country competing for Grumman work. In fact, the vast majority of the simpler machined parts are made for Grumman by subcontractors.

But the really tough jobs, "The type of work Glen Arm does is done by only a few of our major subcontractors," says Ciampa. "Our uniqueness can be credited to the skill and technical knowledge of our people supported with excellent facilities."

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anybody."

As Grumman's military and commercial programs grew, so did Plant 56.

Plant 56-2 opened across Glen Arm Road in June of 1981, adding 62,000 square feet to the facility. Last May, construction started on a 108,000 square-foot addition to that building. Glen Arm is moving towards its greatest modernization since 1968.

Today, most of the parts production in Plant 56 is done with "three-spindle" machines. These can make up to three identical parts simultaneously.

The operator will set up a machine for a job according to instruction contained in a MOP (Manufacturing Operation Plan). This detailed set of instructions is prepared by a Machining Operations methods engineer who works with the shop, the production manager and the com-

people

'Kid Project'

Robot Atom — the creation of Grummanite Phil Barone — is "alive" and well and still working at Piper's Pub in Hempstead. While the five-foot-tall computerized robot has been busy waiting tables and serving drinks, his inventor has not remained idle either. The senior development engineer has embarked on a new project which may provide Jamie Franchino, a three-year-old boy in Massachusetts, with a substitution for something he has never had: arms and legs.

Phil became involved with what he calls the "Kid Project" several months ago. Elaine Gottesman, a Grumman employee and a surrogate aunt to Jamie, read of Phil's work in robotics in a January edition of *Plane News*. A short time before, she had been asked by Jamie's parents if she could invent something Jamie could sit in and use to raise and lower himself.

"I'd made several small toys for him," says Elaine, "but I knew that this was beyond my capability." So she called Phil, who agreed to try it. Working with him is Grumman project engineer Ernie Hansberry.

The project will be funded entirely by the two men, who work on it in their spare time in Phil's home workshop.

After consulting with Jamie's parents and doctors, and becoming familiar with Jamie's physi-

ology, Ernie and Phil have designed what they call a "mock-chair." It is a rough draft of the project that will enable them to see what Jamie can do as far as controlling it. He has one small, foot-like appendage with three digits. He uses it to play with toys and can grasp and lift small items.

Ernie had formerly worked for Grumman Health Systems, where he developed a wheelchair for paraplegics that is operated by torso-control. This method may also be employed for Jamie's cart.

"We want to make it look more like a scooter than a wheelchair," Phil says, "something that Jamie can be proud of".

He also plans to add "robot arms" that will enable Jamie to eat and drink.

Both men assert that Jamie is a very intelligent child, and that he will be the one who really makes "Kid Project" work. Since Jamie is still only three, however, the device cannot be too complex.

"The toughest part about this will be keeping it simple," says Ernie.

The cart will be built so that it can be incremented as Jamie gets older.

"They're both great people for doing this on their own," comments Elaine. "Jamie's parents could never afford to have something like this done. Now they have hope."

Newly elected

Tom Lahey, the deputy general manager of Milledgeville Operations, was named to the board of directors of Baldwin County Hospital in Milledgeville. John Hormann, the assistant to the vice president and general manager of Milledgeville Operations, was elected to the advisory board of directors of Bayshore, Long Island's Southside Hospital. Hormann is based in Bethpage in Plant 2.

New grind for students

For a certain group of students at Hempstead High School, education means more than just "Reading, Writing and 'Rithmetic." Each morning, they begin their daily grind with an intensive course in machine operations.

"School doesn't start until 9 a.m., but these kids are here and working most mornings by eight," says Henry Schneider, the instructor of the course and a retired Grumman machinist.

The course, which is funded by Grumman, was initiated last fall. It is the first time in 10 years that the school's metal shop has been used.

"When I first got here, none of the machines worked and the shop had been vandalized," says Schneider, who worked with the students to get all of the machines in working order. "I was a little skeptical about the project at first," he adds, "but the student response has made it a very pleasant experience."

None of the 11 students in the class had previous experience in machine operations. The only criteria for admittance into the course was good behaviour, adeptness in math — and an eagerness to learn.

The course, which incorporates everything from machine work to mechanical drawing to trigonometry, has inspired several of the students to study engineering in college and Grumman has expressed an interest in hiring them when they finish school. Most of the students already have summer jobs lined up at various machine shops, including one delighted young man who will save his money to bring his mother up from Ecuador.

Schneider, who has a large "Pride of Workmanship" banner hanging in the shop, stresses efficiency, teamwork and especially, imagination. "Let your brains do the thinking and the machines will do the work", he tells his students regularly.

And apparently, they do. Because of its success and the great amount of interest expressed by other students, the program will continue for at least another three years.



Henry Schneider



Spare time inventors. Engineers Ernie Hansberry (L) and Phil Barone with diagrams of "Kid Project".

New assignment

The following Grummanites have recently received new assignments:

Robert J. Bozza, deputy director, General Accounting.

Kenneth R. Fitch, director of Computer Systems, Engineering Dept.

Jesse Munger, chairman of the Corporate Proposal Committee.

Robert Prais, director of Equipment Modernization Programs, Manufacturing.

Albert F. Zoitke, director of Communications Services, Personnel and Administration.

Don't forget to pick up your family picnic tix

A reminder to all Grummanites and their families — tickets for the 42nd annual Grumman Family Picnic are on sale now at all Employee Services (ES) Offices. They're \$4 each (children under 12 will be admitted free) and *no tickets will be sold at the gate.*

This year's outing will be on Saturday, July 23, at the Calverton picnic grounds. Raindate is Sunday, July 24. The \$4 fee covers a wide range of games and entertainment, an abundance of food and beverages, plus many special attractions.

The all-day affair officially begins at 10:00 a.m. with the flag raising ceremony at the bandstand. However, since the Calverton gates will open at 8 a.m., it's a good idea to get someone in the family up and out early to reserve a picnic table and set up camp.

Flag raised and tables claimed, it's over to the playing fields and let the games begin! This year's special attraction will be an international baseball game. Little leaguers from Levittown will take

on the 11 and 12 year old all-stars from Tokyo. The team from Tokyo is touring the United States for two weeks and will be on the Calverton diamond at about 2 p.m.

Kids of all ages will be pleased to know that the picnic ground rides will be operating throughout the day. They include the popular St. Moritz Express, merry-go-round, mini-ferris wheel, boat rides and railroads.

Kiddie entertainment starts at noon, with the traditional kiddie boxing bouts immediately following. And be sure to hold on to your ticket stubs, because at 2:30 p.m. there will be a prize drawing. TV sets and large and small appliances will be given out to over 100 lucky winners.

For first-time picnickers, some words from the wise:

Food — Although plenty will be supplied (hotdogs, ice cream and beverages) many people like to bring along some of their own. Charcoal grills have been popular at past picnics.

Beverages — Since beer and soda will be given out in cups, it's a good idea to have your own pitcher to bring drinks back to your picnic site.

Arrival — As picnic tables are usually claimed early, it's suggested that someone in your party arrive around 8 a.m. to reserve one. Also, since the picnic grounds cover a large area, it's advisable to use the map on this page to make arrangements for meeting friends.

Other — Lawn chairs, table cloths, coolers and any other items that will make your outing a com-

fortable one are recommended.

In the event that a postponement due to inclement weather is necessary, it will be announced early Saturday morning over the following radio stations:

WBAB, Babylon (FM 102.3); WNYG, Babylon (1440 AM); WGBB, Freeport (1240 AM); WLIR, Garden City (FM 92.3); WHLI, Hempstead (1100 AM); WGSM, Huntington (740 AM); WLIX, Islip (540 AM); WALK, Patchogue (FM 97.5, AM 1370) and WLNG, Sag Harbor (FM 92.1, AM 1600). Or you can call LR5-3391 or LR5-3895.

Dowd picked best rose grower at annual show

The Plant 30 cafeteria appeared to be in full bloom last Thursday as it hosted the annual Grumman Garden Forum Rose Show. Over 250 entries from budding novices as well as veteran rose-raisers made this year's competition the largest one ever.

Judging was done from 9 to 11 a.m. by three official Rose Society judges. Form, substance, color, stems and foliage were considered in each of the 14 classes, from which there were separate 1st, 2nd, 3rd, Honorable Mention and assorted special prize winners chosen.

At 11:30, Dan Knowles, vice president of Personnel, announced the winners, class by class. Among them was John Dowd, whose first place Pristine Rose (from the *Single Rose*; *White or Other Color* category) was selected as the "Best in the Show". John, who has been growing roses for four years, also won the third prize in the Spray of Miniature Roses class, and a special award in the Novice competition. Gus Preiser won six awards, including three first place ribbons. Other winners were:

Single Rose (Red) — 1st - Mike Gabriel, 2nd - Joe Gregg, 3rd - Chuck Belensky, Honorable Mention - Tom Cassino.

Single Rose (Pink) — 1st - Gus Preiser, 2nd - Amy Blackwell, 3rd - Tom Cassino, HM - Chuck Belensky, Special - Gary Borysewicz, Spec. - Bill Pietruszewicz.

Single Rose (Yellow) — 1st - Gus Preiser, 2nd - Chuck Belensky, 3rd - Deidre Vitale, HM - Mike Gabriel.

Single Rose (Red or Pink Blends) — 1st - Gus Preiser, 2nd - Chuck Belensky, 3rd - Paul Andrisani, HM - Carol Seymour.

Single Rose (White or Other Color) — 1st - John Dowd, 2nd - Amy Blackwell, 3rd - Mike Sheehan, HM - Dot Kappenberg, Spec. - Frank Sadowski, Spec. - Rocco Amone.

Novice — 1st - Pam Sechrengost, 2nd - Virginia Byers, 3rd - Lydia Hood, HM - Ed Vasta, Spec. - Barry Kocka, Spec. - John Dowd.

Miniature Rose (Single) — 1st - Chuck Belensky, 2nd - Ray Muntz, 3rd - Vito Delisi, HM - Dot Kappenberg, Spec. - Amy Blackwell, Spec. - Chuck Belensky, Spec. - Pam Sechrengost.

Miniature Rose (Sprays) — 1st - Chuck Belensky, 2nd - Bill Pietruszewicz, 3rd - John Dowd, HM - Amy Blackwell.

Rose Sprays (Any Color) — 1st - Mike Gabriel, 2nd - Deidre Vitale, 3rd - Tom Cassino, HM - Gus Preiser, Spec. - Dot Kappenberg, Spec. - Joan Nicholson.

Rose Collection — 1st - Amy Blackwell, 2nd - Tom Cassino, 3rd - Gus Preiser, HM - Mike Gabriel, Spec. - Chuck Belensky.

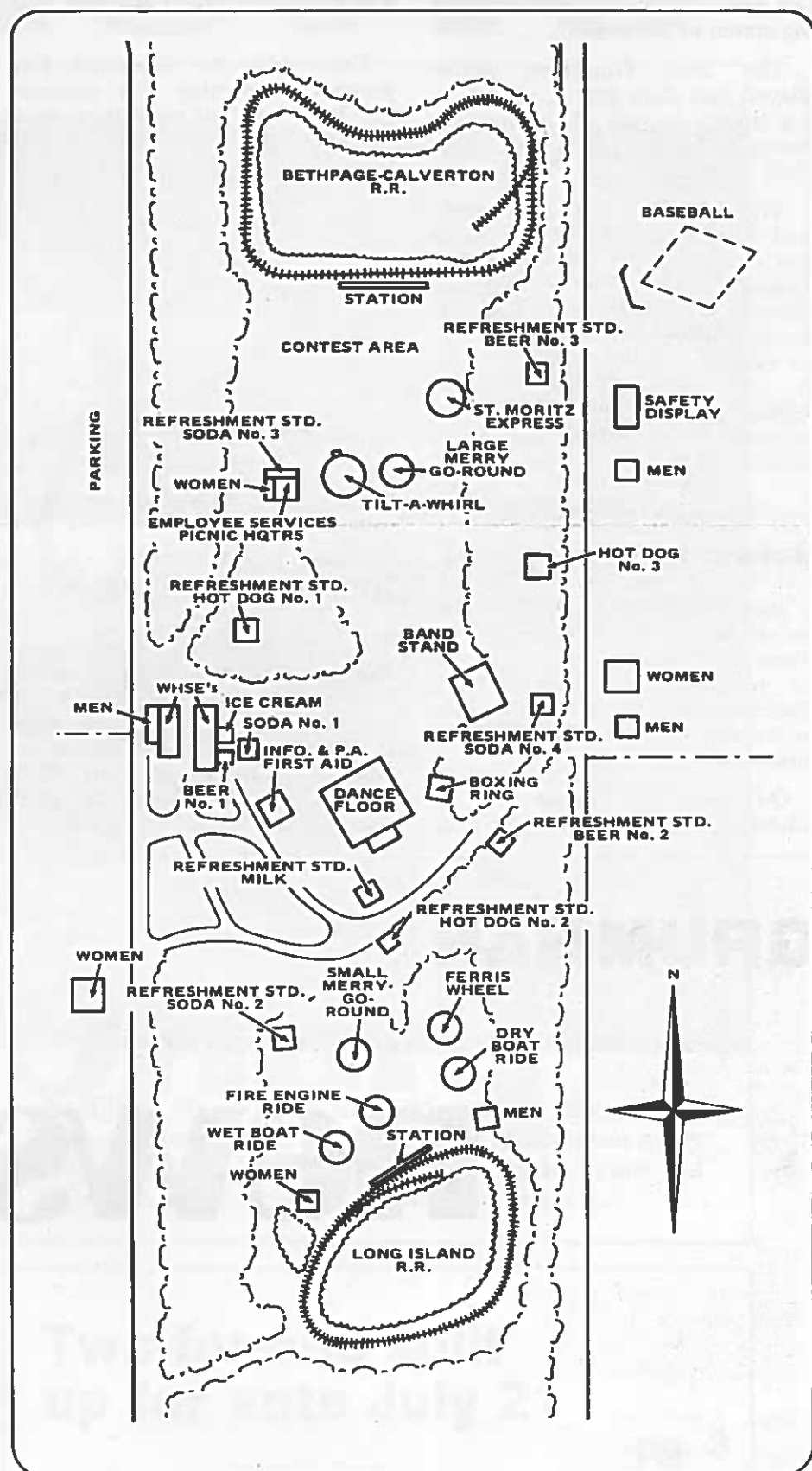
Arrangements — 1st - Dot Kappenberg, 2nd - Amy Blackwell, 3rd - Lillian Fink, HM - Cathy Struble.

Single Seasonal (Excluding Roses) — 1st - Amy Blackwell, 2nd - Betty McLean, 3rd - Dot Kappenberg, HM - Joe Gregg, Spec. - Shirley Kleshifsky, Spec. - Marie Bennett, Spec. - Ray Muntz.

Seasonal Collection (Excluding Roses) — 1st - Ray Muntz, 2nd - Charlotte Graff, 3rd - Karl Hagen, HM - Gus Preiser, Spec. - Tom Scully, Spec. - Amy Blackwell.

Houseplants — 1st - Lillian Fink, 2nd - Amy Blackwell, 3rd - Pam Sechrengost, HM - Anneliese Brown, Spec. - Dot Kappenberg, Spec. - Tom Cassino, Spec. - Toni Arevalo.

Entry Prizes — Virginia Byers and Rocco Amone.



scorecard

In the swing

"Now we're in first place," says Jim Minsky, captain of the Grumman varsity golf team. "Everybody else has one loss, except for us."

Grumman moved into first by beating Photocircuits 4½-3½ for the team's second win of the season. The win came after the Grummanites walloped Sperry in their opening match of the season.

The four Grumman golfers played just plain great golf in beating Sperry — one of the toughest teams in the Long Island Industrial Golf League — by a 7½-½ score.

The twosome of Gene Piwowar and Steve Lake shot a four-under par round, as did co-captains Joe Gambino and Jim Minsky. Minsky himself was three-under for the match. (A par 5 on the Red Course at Bethpage State Park) "I eagled the sixteenth; I nearly double eagled it," he says. "The ball stopped about an inch to the right of the cup."

Got our vote

Dick Opsahl of Plant 35 should be elected to the Baseball Hall of Fame in Cooperstown. After all, he rounded the bases at Shea Stadium nearly twice as many times in one day as Hank Aaron did in his entire career.

On June 17, Opsahl and 82 others started the New York Run-

ners' TAC/USA 100 mile championship. The course was the one-mile long perimeter of the Shea playing field (home of the N.Y. Jets and Mets).

Opsahl did the 100 laps in 17 hours, 29 minutes, 40 seconds. It was a time good enough for 18th overall.

And a one, and a two

Come hear the Grumman Employees Band play this summer. The band has four more stops planned, all this month, on its 1983 Long Island tour.

Wednesday,
July 13 Bald Hill Ski Bowl,
Farmingville

Thursday,
July 14 Bayshore Marina

Friday,
July 15 Port Jefferson
Memorial Park

Friday,
July 22 Stony Brook
Village Green

All performances begin at approximately 8:30 p.m.

Where are the flowers?

To the Grumman Garden Forum Summer Show, they've gone to compete for ribbons and things. So bring the best your garden can grow to Plant 35 on July 28. Show details are available at your ESO.

Even if you don't plan to enter, stop by and enjoy the show. Fo-

rum member Cathy Struble will be giving a flower arranging and corsage making demonstration.

Here's one

On June 10, John Zolezzi made the game look easy by hitting golf's premier shot: the hole-in-one. He did it at the Pine Hills Country Club in Manorville on the club's third hole, a 140-yarder.

Scout's honor

John Crawford was awarded the "Vigil Honor" by the Boy Scouts of America. It's the highest honor that can be given to an Order of the Arrow member.

Crawford, of Plant 5, first became involved in scouting in 1943, when he joined the Cub Scouts. He's been master of Troop 873 since 1973.

Trip tix

Grumman Recreation wants you to know about three upcoming trips you might like to take to get away from it all.

There's a 22-day, coast-to-coast motorcoach tour set to get rolling on October 1. You'll go from Long Island to California and back and see some of the most remarkable places in the country along the way.

From November 10 through 13, you can take a short excursion to Atlantic City, through the Pennsylvania Dutch Country and on to

Philadelphia.

And if you *really* want to get away, there's going to be a Thanksgiving week (November 20-27) trip to Antigua.

For prices and additional information about these and other Grumman Recreation-sponsored trips, call Recreation at Ext. 2133 or stop by Plant 28A.

calendar

Alcoholics Anonymous: every Mon., 4:30 p.m., Pl. 15, conference room C, closed meetings; Personnel Relations, Ext. 3521, Great River meetings; every Wednesday, 4-5 p.m. T. Connolly, Ext. 3521, Calverton; Chemical Dependency Discussion Group, every Mon., 4-5 p.m., Guard Hdq.; open meeting. Personnel, 369-6759, C. Robb, Ext. 117-7038
Karate Club: every Tues. and Thurs., Recreation bldg., beginners 4:30 to 5:30 p.m., advanced 5:30 to 7:00 p.m., black belt instructors, physical and mental development; guests welcome. T. Ortiz, Ext. 4555

Model Railroad Society: every Wed., 7 p.m., Recreation bldg. Regular meeting. Guests welcome. R. Muntz, Ext. 6865
Roller Skating Club: every Thurs., Levittown Skating Ring, 7:30 to 11 p.m. Lessons 6:30 to 7:30 p.m. Guests welcome. H. Denen, Ext. 2291

Stamp Club: First three Wed. of every month; 5-6 p.m., Pl. 35 cafeteria; trading sessions and discussions. S. Hoops, Ext. 3926

Table Tennis: every Thurs., Pl. 24, 5 p.m. and every Fri., Recreation bldg., 5 p.m., also every lunchtime. Beginners and guests welcome. B. Fabricant, Ext. 9307

Tap Dancing Club: every Mon., Recreation bldg., Beginners; 4:30 to 5:30, Intermediate; 5:30-6:50 p.m. Guests welcome. P. Tropea, Ext. 2260

GRUMMAN plane news

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